# CHAPTER Env-Dw 700 WATER QUALITY: STANDARDS, MONITORING, TREATMENT, COMPLIANCE, AND REPORTING

Statutory Authority: RSA 485:3

# **REVISION NOTE #4:**

Document #9859, effective 2-8-11, adopted rules in a new Part Env-Dw 714, which was intended to replace the former rules in Part Env-Ws 381 entitled "Corrosion Control Treatment, Lead and Copper Action Levels." The former rules Env-Ws 381 expired 1-31-11.

Part Env-Dw 714 in Document #9859 replaced all prior filings for the former rules. The prior filings for the former rules Env-Ws 381, beginning with Document #5422, eff 6-22-92, include the following documents:

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#5422, eff 6-22-92
#5873, eff 7-26-94
#6521, eff 6-4-97
#7734, eff 8-2-02
#8351, eff 5-14-05
#9598, eff 11-21-09
#9757, INTERIM, eff 8-2-10, EXPIRED 1-31-11
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# PART Env-Dw 714 CONTROL OF LEAD AND COPPER

Statutory Authority: RSA 485:2; RSA 485:3, I & VII

# Env-Dw 714.01 Purpose and Applicability.

- (a) The purpose of the rules in this part is to implement 40 CFR 141 Subpart I, Control of Lead and Copper, by establishing a treatment technique that includes requirements for corrosion control treatment, source water treatment, lead service line replacement, and public education, as specified in 40 CFR 141 §§80-91, also called Subpart I, which, pursuant to 40 CFR §141.1, constitute the national primary drinking water requirements for lead and copper. The requirements in this part are triggered, in some cases, by the level of lead or copper, or both, exceeding the lead action level or copper action level, or both, as applicable, when measured in samples collected at consumers' water taps.
- (b) The requirements of this part shall apply to every public water system (PWS) that is a community water system (CWS) or a non-transient non-community water system (NTNC), collectively referred to in this part as a water system.

<u>Source</u>. #9859, eff 2-8-11 (See Revision Note #4 at chapter heading for Env-Dw 700)

# Env-Dw 714.02 Definitions.

- (a) As used in this part, the following terms shall be defined as follows:
  - (1) "Initial water quality monitoring" means the monitoring required when a water system exceeds the action level for lead or copper, or both, for the first time, and has not installed corrosion control treatment:
  - (2) "Optimal water quality parameters" means the water quality parameters and ranges required to maintain corrosion control treatment:
  - (3) "Optimized corrosion control treatment" means treatment that controls corrosion such that lead and copper levels do not exceed their respective action levels at taps over 2 or more consecutive monitoring periods;
  - (4) "Reduced water quality monitoring" means reduced monitoring as described in 40 CFR 141.87(e);
  - (5) "Routine water quality monitoring" means the monitoring required after an approved corrosion control treatment is installed;
  - (6) "Source water sample" means a sample collected at every entry point to the distribution system of groundwater or surface water, which is representative of the source(s) after treatment, if any; and
  - (7) "Date of action level exceedance" means the date the department receives the laboratory results which show that the lead action level is exceeded, the copper action level is exceeded, or both action levels are exceeded.
- (b) The following terms used in this part shall be as defined in 40 CFR §141.2, 7-1-10 edition, reprinted in Appendix B:
  - (1) "Large water system";
  - (2) "Medium-sized water system"; and

- (3) "Small water system".
- (c) Where 40 CFR 141 provisions are adopted by reference in this part, terms used in such provisions shall be as defined in 40 CFR 141.2, 7-1-10 edition, unless otherwise defined in this part.
  - (d) All other terms shall be as defined in RSA 485, Env-Ws 302, or Env-Dw 100.

<u>Source</u>. #9859, eff 2-8-11 (See Revision Note #4 at chapter heading for Env-Dw 700)

Env-Dw 714.03 Exceedance of Lead Action Level; Exceedance of Copper Action Level.

- (a) As specified in 40 CFR §141.80(c)(1), 7-1-10 edition, the lead action level shall be deemed exceeded if the concentration of lead in more than 10% of tap water samples collected in accordance with Env-Dw 714.08 during any monitoring period is greater than 0.015 mg/L, that is, if the 90th percentile as computed pursuant to (c), below, is greater than 0.015 mg/L.
- (b) As specified in 40 CFR §141.80(c)(2), 7-1-10 edition, the copper action level shall be deemed exceeded if the concentration of copper in more than 10% of tap water samples collected in accordance with Env-Dw 714.08 during any monitoring period is greater than 1.3 mg/L, that is, if the 90th percentile as computed pursuant to (c), below, is greater than 1.3 mg/L.
- (c) The 90th percentile lead and copper levels shall be computed as specified in 40 CFR §141.80(c)(3)(i) through (v), 7-1-10 edition.

<u>Source</u>. #9859, eff 2-8-11 (See Revision Note #4 at chapter heading for Env-Dw 700)

Env-Dw 714.04 Requirements for Corrosion Control and Source Water Treatment and Monitoring. The owner of any water system that is subject to this part at which the lead action level is exceeded, the copper action level is exceeded, or both action levels are exceeded shall comply with the applicable source water monitoring treatment and corrosion control treatment requirements specified in 40 CFR §141.81 through §141.83 and 40 CFR §141.86 through §141.88, 7-1-10 edition, subject to the following:

- (a) Deadlines established under 40 CFR §141.81 shall be calculated from the date of action level exceedance:
- (b) The system shall perform corrosion control studies within 12 months of the date of action level exceedance; and
- (c) The system shall demonstrate that optimized corrosion control treatment has been achieved within 24 months of the date of action level exceedance.

<u>Source</u>. #9859, eff 2-8-11 (See Revision Note #4 at chapter heading for Env-Dw 700)

Env-Dw 714.05 <u>Lead Service Line Replacement Requirements</u>. The owner of any water system that is subject to this part at which the lead action level is still exceeded after implementation of applicable corrosion control and source water treatment requirements shall comply with the lead service line replacement requirements specified in 40 CFR §141.84, 7-1-10 edition.

<u>Source</u>. #9859, eff 2-8-11 (See Revision Note #4 at chapter heading for Env-Dw 700)

Env-Dw 714.06 Customer Notification and Public Education Requirements.

(a) The owner of a water system that is subject to this part shall:

- (1) Comply with the customer notification of lead tap water results as specified in 40 CFR §141.85, 7-1-10 edition; and
- (2) Provide documentation to the department of customer notification as specified in Env-Dw 714.07.
- (b) The owner of a water system that is subject to this part at which the lead action level is exceeded shall comply with the public education requirements as specified in 40 CFR §141.85, 7-1-10 edition, except that public education deadlines shall be calculated from the date of action level exceedance.

<u>Source</u>. #9859, eff 2-8-11 (See Revision Note #4 at chapter heading for Env-Dw 700)

Env-Dw 714.07 <u>Reporting Requirements</u>. The owner of a water system that is subject to this part shall comply with the reporting requirements specified in 40 CFR §141.90, 7-1-10 edition, except that all deadlines other than the customer notification shall be from the date of action level exceedance.

<u>Source</u>. #9859, eff 2-8-11 (See Revision Note #4 at chapter heading for Env-Dw 700)

Env-Dw 714.08 <u>Monitoring Requirements for Lead and Copper in Tap Water</u>. The owner of a water system that is subject to this part shall comply with the tap water monitoring requirements for lead and copper specified in 40 CFR §141.86, 7-1-10 edition, provided that the samples shall be taken at the sampling points specified in the sampling schedule established pursuant to Env-Dw 708.01 through Env-Dw 708.04.

Source. #9859, eff 2-8-11 (See Revision Note #4 at chapter heading for Env-Dw 700)

# Env-Dw 714.09 Monitoring Requirements for Water Quality Parameters.

(a) The owner of a water system that is subject to this part shall comply with the monitoring requirements for water quality parameters specified in 40 CFR §141.87, 7-1-10 edition, as modified by Table 714-1, below, subject to the notes in (b), below:

Table 714-1: Summary of Monitoring Requirements for Water Quality Parameters

Monitoring period; Location	Parameters	Frequency		
Initial water quality monitoring:				
- Taps - Entry point(s) to distribution system	- pH - alkalinity - conductivity - water temperature - calcium - orthophosphate - silica	As specified in 40 CFR 141.87, except that the frequency shall be twice in 90 days after the date of action level exceedance		
Routine water quality monitoring:				
- Taps	- pH - alkalinity - calcium <sup>A</sup> - orthophosphate <sup>B</sup> - silica <sup>C</sup>	As specified in 40 CFR 141.87, except that the frequency shall be every 3 months for parameters to be reported twice during each monitoring period		

Monitoring period; Location	Parameters	Frequency		
- Entry point(s) to distribution system	- pH - alkalinity <sup>D</sup> - inhibitor <sup>E</sup>	No less frequently than every 2 weeks		
Optimal water quality parameters:				
- Taps	- pH - alkalinity - calcium <sup>A</sup> orthophosphate <sup>B</sup> - silica <sup>C</sup>	Every 6 months		
- Entry points(s) to distribution system	- pH - alkalinity <sup>D</sup> - inhibitor <sup>E</sup>	No less frequently than every 2 weeks <sup>F</sup>		
Reduced water quality monitoring:				
- Taps	- pH - alkalinity - calcium <sup>A</sup> - orthophosphate <sup>B</sup> - silica <sup>C</sup>	Every 6 months, annually or every 3 years; reduced number of sites		
- Entry point(s) to distribution system	- pH - alkalinity <sup>D</sup> - inhibitor <sup>E</sup>	No reductions; continues no less frequently than every 2 weeks <sup>F</sup>		

- (b) The following notes shall apply to Table 714-1:
  - (1) "A" means that calcium analysis is required only if calcium carbonate stabilization is used as part of corrosion control;
  - (2) "B" means that orthophosphate analysis is required only if an inhibitor containing a phosphate compound is used;
  - (3) "C" means that silica analysis is required only if an inhibitor containing a silicate compound is used;
  - (4) "D" means that analysis of the dosage rate of the chemical used to adjust alkalinity and the alkalinity concentration is required only if alkalinity is adjusted as part of corrosion control;
  - (5) "E" means that analysis of the dosage rate of the inhibitor used and the concentration of orthophosphate or silica, as applicable, is required only if a corrosion inhibitor is used as part of corrosion control; and
  - (6) "F" means that the system owner shall maintain a log which identifies, for each sample taken, the date the sample was taken, the sampling location, and the result.

Source. #9859, eff 2-8-11 (See Revision Note #4 at chapter heading for Env-Dw 700)

Env-Dw 714.10 <u>Monitoring Requirements for Lead and Copper in Source Water</u>. The owner of a water system that is subject to this part shall:

(a) Comply with the monitoring requirements for lead and copper in source water at every entry point to the distribution system as specified in 40 CFR §141.88, 7-1-10 edition; and

(b) Collect and submit to the department a confirmation sample for any sampling location for which the monitoring result shows either lead at or above 0.015 mg/L or copper at or above 1.3 mg/L, or both.

<u>Source</u>. #9859, eff 2-8-11 (See Revision Note #4 at chapter heading for Env-Dw 700)

Env-Dw 714.11 <u>Analytical Requirements</u>. All analyses required by this part shall be done in compliance with the analytical requirements specified in 40 CFR §141.89, 7-1-10 edition.

Source. #9859, eff 2-8-11 (See Revision Note #4 at chapter heading for Env-Dw 700)

Env-Dw 714.12 <u>Recordkeeping Requirements</u>. The owner of a water system that is subject to this part shall:

- (a) Comply with the recordkeeping requirements of 40 CFR §141.91, 7-1-10 edition, as reprinted in Appendix B; and
- (b) Maintain monthly optimized water quality parameter logs for the life of the corrosion control treatment and make such logs available to the department for review.

Source. #9859, eff 2-8-11 (See Revision Note #4 at chapter heading for Env-Dw 700)

# APPENDIX A - STATUTES/REGULATIONS IMPLEMENTED

Rule Section(s)	State Statute(s) Implemented	Federal Regulation(s) Implemented
PART Env-Dw 714	RSA 485:1; RSA 485:3, I & VII	40 CFR 141 Subpart I (§§80-91)
Env-Dw 714.01	RSA 485:1; RSA 485:3, I & VII	40 CFR §141.1; 40 CFR §141.80(a)-(b)
Env-Dw 714.02	RSA 485:1; RSA 485:3, I & VII	40 CFR §141.2
Env-Dw 714.03	RSA 485:1; RSA 485:3, I & VII	40 CFR §141.80(c)
Env-Dw 714.04	RSA 485:1; RSA 485:3, I & VII	40 CFR §§141.81 - 141.83; §§141.86 - 141.88
Env-Dw 714.05	RSA 485:1; RSA 485:3, I & VII	40 CFR §141.84
Env-Dw 714.06	RSA 485:1; RSA 485:3, I & VII	40 CFR §141.85
Env-Dw 714.07	RSA 485:1; RSA 485:3, I & VII	40 CFR §141.90
Env-Dw 714.08	RSA 485:1; RSA 485:3, I & VII	40 CFR §141.86
Env-Dw 714.09	RSA 485:1; RSA 485:3, I & VII	40 CFR §141.87
Env-Dw 714.10	RSA 485:1; RSA 485:3, I & VII	40 CFR §141.88
Env-Dw 714.11	RSA 485:1; RSA 485:3, I & VII	40 CFR §141.89
Env-Dw 714.12	RSA 485:1; RSA 485:3, I & VII	40 CFR §141.91

# APPENDIX B To Env-Dw 714 (Doc. #9859, eff 2-8-11)

# **Definitions from 40 CFR §141.2:**

# 40 CFR §141.91 Recordkeeping requirements:

"Any system subject to the requirements of this subpart shall retain on its premises original records of all sampling data and analyses, reports, surveys, letters, evaluations, schedules, State determinations, and any other information required by §§141.81 through 141.88. Each water system shall retain the records required by this section for no fewer than 12 years."

<sup>&</sup>quot;Large water system, for the purpose of subpart I of this part only, means a water system that serves more than 50,000 persons."

<sup>&</sup>quot;Medium-size water system, for the purpose of subpart I of this part only, means a water system that serves greater than 3,300 and less than or equal to 50,000 persons."

<sup>&</sup>quot;Small water system, for the purpose of subpart I of this part only, means a water system that serves 3,300 persons or fewer."